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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,691	11/13/2000	Achim Michael Nuebling	39199-9505	7139

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EXAMINER	
TRAN, TAM D	

ART UNIT	PAPER NUMBER
2676	

DATE MAILED: 07/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/711,691	Applicant(s) NUEBLING ET AL.
	Examiner Tam D. Tran	Art Unit 2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6,7* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-59 are rejected under 35 U.S.C. 102(e) as being anticipated by Pang et al. (USPN 6558325 B1), hereinafter simply Pang.

2. In regard to claim 1, 23, 42, Pang teaches a method of a system for displaying physiological patient data from a cyclic physiological waveform, the patient data including a plurality of data points, each data point representing the amplitude of the physiological patient data, the method comprising the acts of: acquiring the physiological patient data; and displaying the physiological patient data in a three dimensional representation. See col.2 lines 38-44.

3. In regard to claims 2-5, 16-19, 26, 27, 45, 46, Pang teaches a method of a system for displaying physiological patient data, wherein it is inherent that physiological data is electrocardiogram data, blood pressure data, cardiac output data, pulse oximetry data. See col.7 lines 20-25.

4. In regard to claims 6, 7, 20, 28, 29, 48, Pang teaches a method of a system for displaying physiological patient data, wherein physiological patient data are stored in memory. See col.3 line 21-27.

5. In regard to claims 8-10, 12, 21, 30, 37, 38, 49, 56-58, Pang teaches a method of a system for displaying physiological patient data, having parsing the physiological patient data into a series of waveforms, median waveforms. See col.7 lines 30-37.

6. In regard to claims 11, 13, 47, 53, 54, 55, Pang teaches a method of a system for displaying physiological patient data, wherein data are display on one or more axes (the act of displaying further includes the act of assigning a representative X coordinate, Y coordinate, and Z coordinate, to each data point and plotting each data point on the display to produce a three dimensional representation). See col.6 lines 32-52.

7. In regard to claims 14, 22, Pang teaches a method of a system for displaying physiological patient data, wherein data are display with multi-frame image. It is inherent that signal data for displaying has specific range. See col.6 lines 32-52.

8. In regard to claim 15, Pang teaches a method of a system for displaying physiological patient data, the method comprising: acquiring the physiological patient data; storing the physiological patient data in a memory array; see col.3 line 21-27; and displaying the physiological patient data in a three dimensional representation, the act of displaying including parsing the physiological patient data into a series of waveforms such that each successive waveform is plotted in a temporal alignment to allow detection of long term trends in physiological data, see col.7 lines 30-37, the act of parsing each waveform into a series of successive data points such that each data point has a coordinate that is plotted on the display to produce a three dimensional representation, each successive data point having a discrete amplitude, and assigning a color according to the amplitude of the data point if the amplitude is within the relevant range. See col.9 lines 34-40.

9. In regard to claim 24, 43, Pang teaches a method of a system for displaying physiological patient data, and comprising monitors device (video display) as the source of physiological patient data. See col.2 lines 62-65.

10. In regard to claim 25, 44, Pang teaches a method of a system for displaying physiological patient data, electronic system having sensor or transducer. See col.3 lines 12-16.

11. In regard to claims 31-33, 40, 50-52, 59, Pang teaches a method of a system for displaying physiological patient data, and comprising monitors device as the source of physiological patient data; See col.2 lines 62-65. It is inherent that the monitor (display) can be black-white or color and having pixels.

12. In regard to claims 34-36, 39, Pang teaches a method of a system for displaying physiological patient data, it is inherent that the electronic system has processor and software.

13. In regard to claim 41, Pang teaches a software program for generating a display of physiological data from a cyclic physiological waveform, the software program comprising:(a) a program module for acquiring the physiological patient data; (b) a program module for storing the physiological patient data in a memory array; see col.3 line 21-27; (c) a program module for displaying a three dimensional representation; see col.2 lines 38-44;
(d) a program module for setting the current waveform to the first waveform in the waveform array; see col.3 lines 30-37; (e) a program module for providing a Z coordinate counter and initializing the Z coordinate counter to zero; (f) a program module for providing a X coordinate counter and initializing the X coordinate counter to zero; (g) a program module for providing a Y coordinate counter and initializing the Y coordinate counter to zero; (h) a program module for providing a determining the pixel color based on the Y coordinate of the data point; see col.4

lines 45-55; (i) a program module for plotting the current data point of the current waveform at the current coordinate in the color determined in (h); See col.2 lines 39-44;

(j) a program module for incrementing the X coordinate counter and repeating (h) and (i) until all data points in the current waveform are plotted; and (k) a program module for incrementing the Z coordinate counter and repeating (h)-(j) until all waveforms in the waveform array are plotted; see col.3 lines 33-37.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tam D. Tran** whose telephone number is **703-305-4196**. The examiner can normally be reached on MON-FRI from 8:30 – 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella** can be reached on **703-308-6829**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Tam Tran

Examiner

Art unit 2676

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600